

CIA-RDP79B00873A001800020073-4

25X1

/ RED / TSG

ROOM NO.

5S453

BUILDING

25X1

REMARKS:

The T&E report attached is the result of a project initiated upon the recommendation of

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He recommends that the Community be advised of ~~the~~<sup>our</sup> findings since he believes this item is being purchased by some organizations.

I would caution however that NPICs PIs base their conclusions upon their environment. Their findings may not be wholly applicable to others.

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*To be retyped & attached to copy. GR*

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CH/TEB

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EXTENSION

25X1

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NPIC/TSG/ESD/TEB-085/71  
23 April 1971

MEMORANDUM FOR: Special Assistant, Technical Services Group, NPIC

THROUGH : Chief, Engineering Support Division, TSG, NPIC  
Chief, Test and Evaluation Branch, ESD/TSG, NPIC

SUBJECT : Memorandum Test Report on the Felsenthal Zoom Magnifier

1. Introduction

During a recent trip, an NPIC, R&D Staff Officer noted a Felsenthal Zoom Magnifier being used experimentally. He recommended that it be evaluated by NPIC/TSG as a matter of community interest.

2. Equipment Description

The Felsenthal Zoom Magnifier is an optical viewing and measuring aid having a variable magnification range from 4.5X to 9X. A transparent base area allows light to enter for use in viewing prints. Viewing of transparent film can also be accomplished. It may be used where film or print scratching is not critical.

The physical and functional characteristics are as follows:

- (a) Size - 4" high (not extended) by  $2\frac{1}{2}$ " diameter
- (b) Weight - 6 oz.
- (c) Magnification - 4.5X to 9X (with integer detents between)
- (d) Field of View - 1" to  $\frac{1}{2}$ " at target magnification
- (e) Illumination - Direct or transmitted light
- (f) Reticles - Two interchangeable scales reading to .0005 ft and .5mm.

Cost to the Government is approximately \$50.00 per item.

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### 3. Evaluation Summary

While a Test Plan was being formed, two magnifiers were circulated to four NPIC operational divisions for an initial, first-look evaluation. Results of this preliminary evaluation are as follows:

<u>UNDESIRABLE FEATURES</u>	<u>ADVANTAGES</u>
(a) Large size (compared to existing units)	None
(b) Parallax between reticle and target	
(c) Non-Parfocality of zoom system	
(d) More subject to breakage (compared to existing units)	

The only potential advantage of the magnifier is the 4.5X to 9X zoom capability, however none of the evaluators noted this as being of any real value. A majority of the evaluators also pointed out the non-parfocality of the zoom system.

No differences were noted between performance characteristics of the two magnifiers available for testing.

### 4. Conclusions

The technical representatives of NPIC/IEG, DIA/DI-8, IAS, and ARMY/SPAD, after consultation with their PI's who used the device, stated that their organizations had no further interest in it.

As a result, it is recommended that our original plans for a much more thorough testing program be discontinued.

In addition, it is recommended that any organization presently considering a purchase of the magnifier, take a closer look at the unit to determine whether the performance will meet their requirements satisfactorily or not.

Test Engineer  
NPIC/TSG/ESD/TEB

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Distribution:

Original - Addressee

- 1 - NPIC/IEG/OD
- 1 - DDI/IAS
- 1 - Army/SPA
- 1 - DIA/DI-8
- 2 - NPIC/TSG
- 1 - NPIC/TSG/PPS (Thru C/TSG)
- 2 - NPIC/TSG/ESD

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